



State of Utah

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Department of
Environmental Quality

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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-036-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Joel Karmazyn, Environmental Scientist

DATE: May 21, 2013

SUBJECT: FINAL ADOPTION: R307-342. Adhesives and Sealants.

The purpose of this rule is to limit emissions of volatile organic compounds (VOCs) from adhesives, sealants, and primers. The rule applies to manufacturing, commercial, and industrial applications. The rule applies in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties on or after September 1, 2014. R307-342 is being proposed as part of the PM_{2.5} State Implementation Plan (SIP).

On February 6, 2013, the Board proposed for public comment R307-342, which is based on the Ozone Transport Commission (OTC) model rule. The public comment period was held from March 1 to April 1, 2013.

Hill Air Force Base (AFB), Boeing, and Utility Trailer provided written comments representing industrial interests. Staff worked with these stakeholders to address their concerns.

The American Coatings Association, a trade association that represent adhesive, sealant, and primer manufacturers, did not provide formal comments, but instead collaborated with staff throughout the rulemaking process to address manufacturer issues and provided suggestions on rule improvements. No cost information was provided.

A public hearing was held on March 13, 2013. No comments were received during the hearing.

Response to Industrial Comments

1. Hill AFB stated that their workload is controlled by the Department of Defense (DOD) military technical data specifications which require the use of many adhesives and sealants that are beyond the limits in Table 1 of the rule; therefore, Hill AFB has requested a broad exemption from the rule.

Response: Hill AFB is one of three nationwide bases whose mission is to provide depot services for DOD aircraft repair and rework operations. They also rebuild and rework weapons systems and equipment. These specialized services means that Hill AFB is bound by DOD and military contractor specifications called "military technical data." Hill AFB submitted an affidavit from the Air Force explaining the need to meet the military technical data. Hill AFB also conducted an evaluation of their 270 shops to determine which shops require the use of military technical data. They determined that 250 of the 270 shops require the use of military technical data.

We recognize the special conditions for military operations that require consideration under this rule. Not all adhesives and sealants used on base are related to military technical data; therefore, a broad military exemption is not warranted. Staff and Hill AFB reached an agreement that the rule should include an exemption for military operations where DOD military technical data is specifically required.

2. Boeing and Hill AFB recommended the addition of a definition for "aerospace vehicle and components" to assure that there is no unintended regulatory overlap between the source categories in this rule and R307-355. Boeing recommended the following definition so that it is consistent with the aerospace definition in R307-355-4, as follows:

"In the production, rework or repair of aerospace vehicles and components, and undersea-based weapon systems."

Response: A definition for "aerospace components" was added to the rule based on the definition provided within the OTC model rule.

Hill AFB further requested the addition of the following text:

"and support activities, such as maintenance."

Response: This language is better suited for the exemption in R307-342-3(2) (b). An amendment to that section has been made to recognize the need to exempt maintenance related activities for aerospace vehicle and component operations.

Hill AFB requested the expansion of the definition to include components, devices, and application systems.

Response: The expansion of the definition to include components, devices, and application systems that are far removed from the intent of this rule and outside the discussion and exemptions defined in the CTG. Staff does not concur with this request because it is too broad.

3. Add the term "miscellaneous industrial" whenever referring to adhesives or sealant primer because the CTG is for miscellaneous industrial adhesives.

Response: This comment refers to the terminology used in the EPA guidance, Control Techniques Guidelines for Miscellaneous Industrial Adhesives (CTG), EPA-453/R-08-005, September 2008. The Board proposed the use of the OTC model rule as a basis for this rulemaking. The OTC rule effectively meets the intent of the CTG while using other terminology; consequently, this is a matter of terminology that does not affect the rule. Therefore, staff prefers to remain consistent with OTC terminology.

4. Clarify that the exemption for aerosols should include application processes, as per the CTG.

Response: Agreed. The change has been made.

5. Include an exemption for polyester bonding putty as recommended in the CTG.

Response: The CTG does include a recommendation for exempting polyester bonding putty but the OTC model rule does not. Staff consulted with EPA to determine the rationale for the CTG exemption. These putties produce low amounts of VOCs. EPA determined they are insignificant sources. We have included the requested exemption based on EPA's finding.

6. The CTG permits the use of averaging the VOC content of materials.

Response: The OTC model rule does not include the option to average VOCs. A review of other states' rules indicates that they follow the OTC model. In the interest of maintaining this rule consistent with the national model, we do not recommend permitting averaging of VOC.

7. Permit the use of air-assisted airless spray equipment.

Response: We agree this is an efficient method. R307-342-6 has been amended to include air-assisted airless spray.

8. Cleaning of spray equipment can be effectively controlled by work practices. UDAQ should remove the requirements of R307-342-6(2) and replace them with work practice requirements suggested in the CTG.

Response: We encourage the implementation of the suggested work practices at all facilities as best management practices (BMPs) to avoid spills and control fugitive emissions during material handling. The BMPs will not provide emission control during spray equipment cleaning. The objective of this rulemaking is to identify and control VOC to the greatest practical means in order to attain the PM2.5 standard. It is appropriate to maintain equipment cleaning requirements.

9. Add an exemption for facility-wide users with less than 55 gallons per rolling 12-month period.

Response: Agreed. The OTC model rule provides this exemption. The rule has been amended to include the exemption.

DAQ staff determined the need to make further rule amendments in response to public comments:

1. Sources seeking exemption under R307-342-3 shall be required to maintain records demonstrating compliance. Because R307-342-3(6) is a newly added exemption, the record keeping requirement has been renumbered as R307-342-3(7).
2. A definition for "Department of Defense military data" has been added for the newly added exemption for these products. The definition was derived from the Department of Defense manual, *Department of Defense Standardization Program*.
3. R307-342-5(2) has been revised to explain how to apply the limits in Table 1. This amendment is consistent with text in the OTC model rule.

Recommendation: Staff recommends the Board adopt R307-342, Adhesives and Sealants, as amended.

R307. Environmental Quality, Air Quality.**R307-342. Adhesives and Sealants.****R307-342-1. Purpose.**

The purpose of this rule is to limit emissions of volatile organic compounds (VOCs) from adhesives, sealants, primers and cleaning solvents.

R307-342-2. Applicability.

R307-342 applies to any person who manufactures, sells, supplies, or applies any adhesive, sealant, adhesive primer or sealant primer in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah or Weber [County]counties, beginning September 1, 2014.

R307-342-3. Exemptions.

(1) The requirements of R307-342 do not apply to the following:

(a) Adhesives, sealants, adhesive primers or sealant primers being tested or evaluated in any research and development, quality assurance or analytical laboratory;

(b) Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and exempt solvents, as applied;

(c) Cyanoacrylate adhesives;

(d) Adhesives, sealants, adhesive primers or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces or less or that have a net weight of one pound or less, except plastic cement welding adhesives and contact adhesives;

(e) Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon or less; or

(f) Aerosol [~~spray~~]adhesives [~~products~~]and primers dispensed from aerosol spray cans.

(2) The requirements of R307-342 do not apply to the use of adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents in the following operations:

(a) Tire repair operations, provided the label of the adhesive states "for tire repair only;"

(b) In the [~~assembly, repair and manufacture~~]production, rework, repair, or maintenance of aerospace vehicles and components, and undersea-based weapon systems;

(c) In the manufacture of medical equipment; [~~and~~]

(d) Operations that are exclusively covered by Department of Defense military technical data and performed on site at installations owned and/or operated by the United States Armed Forces.

(~~[d]~~e) Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992.

(3) The requirements of R307-342 do not apply to commercial and industrial operations if the total VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used at the source are less than 200 pounds per calendar year.

(4) Adhesive products and sealant products shipped, supplied or sold exclusively outside of the areas specified in R307-342-2 are

1 exempt from the requirements of this rule.

2 (5) ~~[Any person claiming exemption pursuant to R307-342-3 shall~~
3 ~~record and maintain monthly operational records sufficient to~~
4 ~~demonstrate compliance.~~

5 ~~(6)~~ R307-342 shall not apply to any adhesive, sealant, adhesive
6 primer or sealant primer products manufactured for shipment and use
7 outside of the counties specified R307-342-2 as long as the
8 manufacturer or distributor can demonstrate both that the product
9 is intended for shipment and use outside of the applicable counties
10 and that the manufacturer or distributor has taken reasonable prudent
11 precautions to assure that the product is not distributed to the
12 applicable counties.

13 (6) R307-342 shall not apply to the use of any adhesives,
14 sealants, adhesive primers, sealant primers, cleanup solvents and
15 surface preparation solvents, provided the total volume of
16 noncomplying adhesives, sealants, primers, cleanup and surface
17 preparation solvents applied facility-wide does not exceed 55 gallons
18 per rolling 12-month period.

19 (7) Commercial and industrial operations claiming exemption
20 pursuant to R307-342-3 shall record and maintain operational records
21 sufficient to demonstrate compliance.

22 R307-342-4. Definitions.

23 The following additional definitions apply to R307-342:

24 "Acrylonitrile-butadiene-styrene (ABS) welding adhesive" means
25 any adhesive intended by the manufacturer to weld
26 acrylonitrile-butadiene-styrene pipe, which is made by reacting
27 monomers of acrylonitrile, butadiene and styrene.

28 "Adhesive" means any chemical substance that is applied for the
29 purpose of bonding two surfaces together other than by mechanical
30 means.

31 "Adhesive primer" means any product intended by the manufacturer
32 for application to a substrate, prior to the application of an
33 adhesive, to provide a bonding surface.

34 "Aerospace component" means a fabricated part, assembled part,
35 or completed unit, including passenger safety equipment, of any
36 aircraft, helicopter, missile or space vehicle.

37 "Architectural sealant or primer" means any sealant or sealant
38 primer intended by the manufacturer to be applied to stationary
39 structures, including mobile homes and their appurtenances.
40 Appurtenances to an architectural structure include, but are not
41 limited to: hand railings, cabinets, bathroom and kitchen fixtures,
42 fences, rain gutters and downspouts, and windows.

43 "Automotive glass adhesive primer" means an adhesive primer
44 labeled by the manufacturer to be applied to automotive glass prior
45 to installation of the glass using an adhesive or sealant.

46 "Ceramic tile installation adhesive" means any adhesive intended
47 by the manufacturer for use in the installation of ceramic tiles.

48 "Chlorinated polyvinyl chloride plastic (CPVC) plastic" means
49 a polymer of the vinyl chloride monomer that contains 67% chlorine
50 and is typically identified with a CPVC marking.

51 "Chlorinated polyvinyl chloride (CPVC) welding adhesive" means
52 an adhesive labeled for welding of chlorinated polyvinyl chloride
53

1 plastic.

2 "Cleanup solvent" means a VOC-containing material used either
3 to remove a loosely held uncured (i.e., not dry to the touch) adhesive
4 or sealant from a substrate or to clean equipment used in applying
5 a material.

6 "Computer diskette jacket manufacturing adhesive" means any
7 adhesive intended by the manufacturer to glue the fold-over flaps
8 to the body of a vinyl computer diskette jacket.

9 "Contact bond adhesive" means an adhesive that:

10 (1) is designed for application to both surfaces to be bonded
11 together;

12 (2) is allowed to dry before the two surfaces are placed in
13 contact with each other;

14 (3) forms an immediate bond that is impossible, or difficult,
15 to reposition after both adhesive-coated surfaces are placed in
16 contact with each other; and

17 (4) does not need sustained pressure or clamping of surfaces
18 after the adhesive-coated surfaces have been brought together using
19 sufficient momentary pressure to establish full contact between both
20 surfaces.

21 "Contact adhesive" means an adhesive that feels dry to the touch
22 and bonds instantly. Contact adhesives do not include rubber cements
23 that are primarily intended for use on paper substrates and vulcanizing
24 fluids that are designed and labeled for tire repair only.

25 "Cove base" means a flooring trim unit, generally made of vinyl
26 or rubber, having a concave radius on one edge and a convex radius
27 on the opposite edge that is used in forming a junction between the
28 bottom wall course and the floor or to form an inside corner.

29 "Cove base installation adhesive" means any adhesive intended
30 by the manufacturer to be used for the installation of cove base or
31 wall base on a wall or vertical surface at floor level.

32 "Cyanoacrylate adhesive" means any adhesive with a cyanoacrylate
33 content of at least 95% by weight.

34 "Department of Defense military technical data" means a
35 specification that specifies design requirements, such as materials
36 to be used, how a requirement is to be achieved, or how an item is
37 to be fabricated or constructed.

38 "Enclosed cleaning system" means a cleaner consisting of a closed
39 container with a door or top that can be opened and closed and fitted
40 with cleaning connections. A spray gun is attached to the enclosed
41 cleaning system by a connection, and solvent is pumped through the
42 gun to clean it. The cleaning solvent falls back into the cleaning
43 system's solvent reservoir for recirculation.

44 "Flexible vinyl" means non-rigid polyvinyl chloride plastic with
45 at least 5% by weight plasticizer content.

46 "Fiberglass" means a material consisting of extremely fine glass
47 fibers.

48 "Indoor floor covering installation adhesive" means any adhesive
49 intended by the manufacturer for use in the installation of wood
50 flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet,
51 resilient sheet and roll or artificial grass. Adhesives used to
52 install ceramic tile and perimeter bonded sheet flooring with vinyl
53 backing onto a non-porous substrate, such as flexible vinyl, are

1 excluded from this category.

2 "Laminate" means a product made by bonding together two or more
3 layers of material.

4 "Marine deck sealant" or "marine deck sealant primer" means any
5 sealant or sealant primer labeled for application to wooden marine
6 decks.

7 "Medical equipment manufacturing" means the manufacture of
8 medical devices, such as, but not limited to, catheters, heart valves,
9 blood cardioplegia machines, tracheostomy tubes, blood oxygenators,
10 and cardiatory reservoirs.

11 "Metal to urethane/rubber molding or casting adhesive" means
12 any adhesive intended by the manufacturer to bond metal to high density
13 or elastomeric urethane or molded rubber materials, in heater molding
14 or casting processes, to fabricate products such as rollers for
15 computer printers or other paper handling equipment.

16 "Multipurpose construction adhesive" means any adhesive intended
17 by the manufacturer for use in the installation or repair of various
18 construction materials, including but not limited to drywall,
19 subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile
20 and acoustical tile.

21 "Nonmembrane roof installation/repair adhesive" means any
22 adhesive intended by the manufacturer for use in the installation
23 or repair of nonmembrane roofs and that is not intended for the
24 installation of prefabricated single-ply flexible roofing membrane,
25 including, but not limited to, plastic or asphalt roof cement, asphalt
26 roof coating and cold application cement.

27 "Outdoor floor covering installation adhesive" means any
28 adhesive intended by the manufacturer for use in the installation
29 of floor covering that is not in an enclosure and that is exposed
30 to ambient weather conditions during normal use.

31 "Panel installation" means the installation of plywood,
32 pre-decorated hardboard (or tileboard), fiberglass reinforced
33 plastic, and similar pre-decorated or non-decorated panels to studs
34 or solid surfaces using an adhesive formulated for that purpose.

35 "Perimeter bonded sheet flooring installation" means the
36 installation of sheet flooring with vinyl backing onto a nonporous
37 substrate using an adhesive designed to be applied only to a strip
38 of up to four inches wide around the perimeter of the sheet flooring.

39 "Plastic cement welding adhesive" means any adhesive intended
40 by the manufacturer for use to dissolve the surface of plastic to
41 form a bond between mating surfaces.

42 "Plastic cement welding adhesive primer" means any primer
43 intended by the manufacturer for use to prepare plastic substrates
44 prior to bonding or welding.

45 "Plasticizer" means a material such as a high boiling point
46 organic solvent that is incorporated into a vinyl to increase its
47 flexibility, workability, or distensibility, as determined by ASTM
48 Method E-260-96.

49 "Polyvinyl chloride (PVC) plastic" means a polymer of the
50 chlorinated vinyl monomer that contains 57% chlorine. "Polyvinyl
51 chloride welding adhesive" or "PVC welding adhesive" means any
52 adhesive intended by the manufacturer for use in the welding of PVC
53 plastic pipe.

1 "Porous material" means a substance that has tiny openings, often
2 microscopic, in which fluids may be absorbed or discharged, including,
3 but not limited to, wood, paper and corrugated paperboard.

4 "Roadway sealant" means any sealant intended by the manufacturer
5 for application to public streets, highways and other surfaces,
6 including but not limited to curbs, berms, driveways and parking lots.

7 "Rubber" means any natural or manmade rubber substrate, including
8 styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber,
9 nitrile rubber, chlorosulfonated polyethylene and ethylene propylene
10 diene terpolymer.

11 "Sealant primer" means any product intended by the manufacturer
12 for application to a substrate, prior to the application of a sealant,
13 to enhance the bonding surface.

14 "Sealant" means any material with adhesive properties, including
15 sealant primers and caulks, that is formulated primarily to fill,
16 seal, waterproof or weatherproof gaps or joints between two surfaces.

17 "Sheet-applied rubber installation" means the process of
18 applying sheet rubber liners by hand to metal or plastic substrates
19 to protect the underlying substrate from corrosion or abrasion. These
20 operations also include laminating sheet rubber to fabric by hand.

21 "Single-ply roof membrane" means a prefabricated single sheet
22 of rubber, normally ethylene-propylenediene terpolymer, that is field
23 applied to a building roof using one layer of membrane material.

24 "Single-ply roof membrane installation and repair adhesive"
25 means any adhesive labeled for use in the installation or repair of
26 single-ply roof membrane.

27 (1) Installation includes, as a minimum, attaching the edge
28 of the membrane to the edge of the roof and applying flashings to
29 vents, pipes and ducts that protrude through the membrane.

30 (2) Repair includes gluing the edges of torn membrane together,
31 attaching a patch over a hole and reapplying flashings to vents, pipes
32 or ducts installed through the membrane.

33 "Single-ply roof membrane adhesive primer" means any primer
34 labeled for use to clean and promote adhesion of the single-ply roof
35 membrane seams or splices prior to bonding.

36 "Single-ply roof membrane sealant" means any sealant labeled
37 for application to single-ply roof membrane.

38 "Structural glazing adhesive" means any adhesive intended by
39 the manufacturer to apply glass, ceramic, metal, stone or composite
40 panels to exterior building frames.

41 "Subfloor installation" means the installation of subflooring
42 material over floor joists, including the construction of any load
43 bearing joists. Subflooring is covered by a finish surface material.

44 "Surface preparation solvent" means a solvent used to remove
45 dirt, oil and other contaminants from a substrate prior to the
46 application of a primer, adhesive or sealant.

47 "Thin metal laminating adhesive" means any adhesive intended
48 by the manufacturer for use in bonding multiple layers of metal to
49 metal or metal to plastic in the production of electronic or magnetic
50 components in which the thickness of the bond line[~~is~~] is less than
51 0.25 mils.

52 "Tire repair" means a process that includes expanding a hole,
53 tear, fissure or blemish in a tire casing by grinding or gouging,

applying adhesive, and filling the hole or crevice with rubber.

"Traffic marking tape" means preformed reflective film intended by the manufacturer for application to public streets, highways and other surfaces, including curbs, berms, driveways and parking lots.

"Traffic marking tape adhesive primer" means any primer intended by the manufacturer for application to surfaces prior to installation of traffic marking tape.

"Undersea-based weapons systems components" means the fabrication of parts, assembly of parts or completed units of any portion of a missile launching system used on undersea ships.

"Waterproof resorcinol glue" means a two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

R307-342-5. Emission Standards.

(1) No person shall manufacturer, sell, supply or offer for sale any adhesive, sealant, adhesive primer or sealant primer with a VOC content in excess of the limits in Table 1.

(2) No person shall apply any adhesive, sealant, adhesive primer or sealant primer with a VOC content in excess of the limits in Table 1 unless that person uses an add-on control device as specified in R307-342-8.

(3) The VOC content limits in Table 1 for adhesives applied to particular substrates shall apply as follows:

(a) If a person uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable rather than an adhesive-to-substrate limit; and

(b) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

TABLE 1

VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers and Adhesives Applied to Particular Substrates (minus water and exempt compounds (compounds that are not defined as VOC), as applied

Adhesive, Sealant, Adhesive Primer Category	VOC Content Limit (grams VOC/liter)
Adhesives	
ABS welding	400
Ceramic tile installation	130
Computer diskette jacket manufacturing	850
Contact bond	250

1		
2	Cove base installation	150
3		
4	CPVC welding	490
5		
6	Indoor floor covering	150
7	installation	
8		
9	Metal to urethane/rubber	850
10	molding or casting	
11		
12	Multipurpose construction	200
13		
14	Nonmembrane roof	300
15	installation/repair	
16		
17	Other plastic cement welding	510
18		
19	Outdoor floor covering	250
20	installation	
21		
22	PVC welding	510
23		
24	Single-ply roof membrane	250
25	installation/repair	
26		
27	Structural glazing	100
28		
29	Thin metal laminating	780
30		
31	Tire retread	100
32		
33	Perimeter bonded sheet vinyl	660
34	flooring installation	
35		
36	Waterproof resorcinol glue	170
37		
38	Sheet-applied rubber	850
39	installation	
40		
41	Sealants	
42		
43	Architectural	250
44		
45	Marine deck	760
46		
47	Nonmembrane roof	300
48	installation/repair	
49		
50	Roadway	250
51		
52	Single-ply roof membrane	450
53		

1	Other	420
2		
3	Adhesive Primers	
4		
5	Automotive glass	700
6		
7	Plastic cement welding	650
8		
9	Single-ply roof membrane	250
10		
11	Traffic marking tape	150
12		
13	Other	250
14		
15	Sealant Primers	
16		
17	Non-porous architectural	250
18		
19	Porous architectural	775
20		
21	Marine deck	760
22		
23	Other	750
24		
25	Adhesives Applied to the Listed Substrate	
26		
27	Flexible vinyl	250
28		
29	Fiberglass	200
30		
31	Metal	30
32		
33	Porous material	120
34		
35	Rubber	250
36		
37	Other substrates	250
38		
39		

R307-342-6. Application Equipment.

(1) An operator shall only use the following equipment to apply adhesives and sealants:

- (a) Electrostatic application;
- (b) Flow coater;
- (c) Roll coater;
- (d) Dip coater;
- (e) Hand application method;
- (f) Airless spray and air-assisted airless spray;
- (g) High volume, low pressure spray equipment operated in accordance with the manufacturers specifications; or
- (h) Other methods having a minimum 65% transfer efficiency.

(2) Removal of an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment shall be performed

as follows:

- (a) In an enclosed cleaning system;
- (b) Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material; or
- (c) Parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 mm Hg at 20 degrees Celsius and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container.

R307-342-7. Administrative Requirements.

(1) Each person that manufactures adhesives, sealants, and adhesive primers subject to this rule shall maintain records demonstrating compliance~~[-with this rule, including-]~~.

(2) Commercial and industrial operations that are not exempt under R307-342-3 shall maintain records demonstrating compliance with this rule, including:

(a) A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent in use and in storage;

(b) A material data sheet for each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent and surface preparation solvent;

(c) A list of catalysts, reducers or other components used and the mix ratio;

(d) The VOC content or vapor pressure, as applied; and

(e) The monthly volume of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent used.

(2) Except as provided in R307-342-6(2), no person shall use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius.

R307-342-8. Optional Add-On Controls.

(1) VOC emissions from the manufacturer or use of all adhesives, sealants, adhesive primers or sealant primers subject to this rule shall be reduced by an overall capture and control efficiency of at least 85% by weight.

(2) The owner or operator of an emission control system shall provide documentation that the emissions control system will attain the requirements of R307-342-8.

(3) The owner or operator of an emission control system shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

R307-342-9. Container Labeling.

Each manufacturer of an adhesive, sealant, adhesive primer or sealant primer subject to this rule shall display the following

1 information on the product container or label:

2 (1) A statement of the manufacture's recommendation regarding
3 thinning, reducing, or mixing of the product.

4 (a) R307-342-9 does not apply to the thinning of a product with
5 water.

6 (b) If the thinning of the product prior to use is not necessary,
7 the recommendation shall specify that the product is to be applied
8 without thinning.

9 (2) The maximum or the actual VOC content of the product in
10 accordance with Table 1, as supplied, displayed in grams of VOC per
11 liter of product; and

12 (3) The maximum or the actual VOC content of the product in
13 accordance with Table 1, which includes the manufacture's maximum
14 recommendation for thinning, as applied, displayed in grams of VOC
15 per liter of product.

16
17 **KEY: air pollution, adhesives, sealants, primers**

18 **Date of Enactment or Last Substantive Amendment: 2013**

19 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)**